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September 13, 2004

FACSIMILE COVER SHEET

To:	Examiner Kumar	From:	Penny Lurie
Facsimile Number:	571-273-3011	Telephone No.	571-272-3011
Number of Pages (including cover sheet):		12	

Per your request, we are resending the facsimile that was sent to you on June 9, 2004 for 09/763,958.

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June 9, 2004

FACSIMILE COVER SHEET

To:	Examiner Kumar	From:	Eric J. Robinson
Facsimile Number:	703-746-8307	Telephone No.	
Number of Pages (including cover sheet):	11		

Examiner Kumar:

As we discussed, please find the IDS and copies of the English translation of the JP Official Action, the original Japanese language copy of the Official Action, the English language abstract of JP 11-098432, and the first page of the Japanese language copy of JP 11-098432. I understand you can obtain the complete Japanese language version of JP 11-098432 and U.S. Patent 6,490,010 at your end, but please let me know if there is any difficulty and we can easily provide them for you.

I have also attached a *Proposed Amendment* that I believe incorporates the Examiner's Amendments we recently discussed. You are authorized to enter these amendments and please call me if there are any further amendments needed or if I misunderstood your original proposal.

I understand you will consider the references in the IDS and issue either a further Action or Notice of Allowance, as appropriate, and please contact me at any time if I can be of any further assistance.

Thank you.

Eric Robinson
Reg. No. 38,285

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#5 9/13/04

Attorney Docket No. 0670-255

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:	)	Group Art Unit: 2631
Atsushi SHINODA et al.	)	Examiner: P. Kumar
Serial No. 09/763,958	)	
Filed: February 28, 2001	)	
For: CARRIER REPRODUCING CIRCUIT	)	

INFORMATION DISCLOSURE STATEMENT

Honorable Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. 1.56 and 37 C.F.R. 1.97-1.99, Applicant submits herewith a Form PTO-1449 listing references known to Applicant and requests that these references be made of record in the above identified application. Copies of the references listed are submitted herewith in accordance with 37 C.F.R. 1.98(a).

JP 11-098432 discloses a phase-rotation circuit for performing a phase-rotation at a predetermined angular velocity by converting the synchronously detected output into signal point positions, a phase detector for phase-detecting the output from the phase-rotation circuit, and an auto-correlation detection circuit for determining the auto-correlation function of the output from the phase detector.

JP 11-098432 however does not disclose a TMCC section detection circuit (4) for detecting a section of the TMCC signal, a phase detector (6) for phase-detecting the output of the phase rotation circuit and an auto-correlation detection circuit (7) for determining an auto-correlation function of the output from the phase detector (6) in the TMCC section and producing an angular velocity based on a repetition period of the determined auto-correlation function.

U.S. Patent No. 6,490,010 is in the family of JP 11-098432.

This Information Disclosure Statement is being submitted before the issuance of a first Office Action on the merits, therefore, no fee is required.

Respectfully submitted,

Eric J. Robinson
Reg. No. 38,285

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Proposed Amendment

1. (Currently Amended) A carrier reproducing method of a PSK modulated signal, comprising steps of:

synchronously detecting the PSK modulated signals with a reproducing carrier signal from an oscillator to create a synchronous detecting signal;

phase-detecting said synchronous detecting signal to create a phase detecting signal;

creating an auto-correlation function output taken over a predetermined time interval (TMCC period) on said phase detecting signal; and

applying a control signal based on a period of said auto-correlation function output to said oscillator to make a reproducing control signal from said oscillator synchronize with a carriers of the PSK modulated signal,

characterized in that a phase rotation of a predetermined angular velocity (α) which is larger than a maximum expected alienation frequency of said oscillator with respect to ~~the~~ a carrier frequency to said phase detecting signal so that on the phase detecting signal to which said phase rotation is given, the auto-correlation function output taken over said predetermined period is created.

4. (Currently Amended) The carrier reproducing method according to claim 1, characterized in that a period (T) corresponding with a difference between said predetermined angular velocity (α) and a maximum one of said expected alienation frequency is selected so as to become smaller than a predetermined time interval taking said auto-correlation.